

LISTING OF THE CLAIMS

1-13 (Canceled)

14. (Previously Presented) A method for discovering a type of device associated with an input/output (I/O) path of a storage area network, comprising:

- (a) retrieving a plurality of property files from a predefined subdirectory, wherein each property file of said plurality of property files describes a type of device;
- (b) removing a class identifier from each property file of said property files, wherein each class identifier identifies a class;
- (c) creating an object of the respective class of each class identifier; and
- (d) calling a specific method, from a plurality of methods, for each created object, wherein said specific method is operable to determine whether a device associated with said I/O path is the type of device described by the property file associated with said object.

15. (Original) The method of claim 14 further comprising:

- (e) adding a new storage device to said storage area network, wherein said new storage device is caused to be associated with said I/O path, and wherein said new storage device is a new type of device to said storage area network;
- (f) storing a new property file in said predefined subdirectory describing said new type of device; and
- (g) restarting code of a management server to thereby cause repetition of steps (a)-(d) utilizing said new property file.

16. (Original) The method of claim 14 wherein a default property file of said plurality of property files identifies a default small computer system interface (SCSI) class, wherein said default SCSI class defines a method to identify devices by comparing SCSI vendor identifier and product identifier information to at least one field in said default property file.

17. (Original) The method of claim 14 wherein a default property file of said plurality of property files identifies a simple network management protocol (SNMP) class, wherein said default SNMP class defines a method to identify devices by comparing a SNMP system object identifier to at least one field in said default property file.

18. (Previously Presented) A system for analyzing input/output (I/O) paths of a storage area network (SAN) comprising:

a plurality of servers, wherein said servers are communicatively coupled to a fabric of said SAN;

a plurality of host agent processes, wherein each of said host agent processes executes on a respective server of said plurality of servers, and wherein said host agent processes are operable to query devices associated with host logical unit numbers I/O paths of said SAN to gather device information;

a management server, wherein said management server employs a simple network management protocol (SNMP) manager process to query devices associated with SNMP I/O paths of said SAN to gather device information;

a plurality of property files stored in a predefined directory, wherein each property file of said plurality of property files describes a type of device, and wherein each property file of said plurality of property files includes an identifier of code operable to determine whether a device associated with an I/O path is the type of device described by its associated property file; and

a management server process, wherein said management server process is operable to receive gathered device information from said plurality of host agent processes and from said SNMP manager process; and wherein said management server process is operable to call code identified by property files with gathered device information as arguments to thereby uniquely identify the devices associated with said I/O paths of said SAN.

19. (Original) The system of claim 18 wherein said management server process, includes:

code for creating an array of identifiers including each said identifier from each property file;

code for instantiating a plurality of small computer system interface (SCSI) device discovery objects utilizing identifiers from said array that identify SCSI device classes; and

code for instantiating a plurality of SNMP device discovery objects utilizing identifiers from said array that identify SNMP device classes.

20. (Original) The system of claim 19 wherein said management server process includes:

code for calling a method of each instantiated SCSI device discovery object for each host logical unit numbers I/O path; and

code for calling a method of each instantiated SNMP device discovery object for each SNMP I/O path.

21. (Previously Presented) A method for identifying a device associated with an input/output (I/O) path, comprising:

retrieving device information from a target device associated with said I/O path utilizing a device control protocol;

retrieving a property file defining a device, wherein said property file designates a code set for identifying, from a plurality of different code sets for identifying;

executing said designated code, wherein said designated code set utilizes said retrieved information to determine whether said target device is said device defined by said property file.

22. (Previously Presented) The method of claim 21 wherein said device information is not a SysObjID.

23. (Previously Presented) The method of claim 21 wherein said property file identifies a class defining said type of device, said method further comprising:

instantiating an object of said class;

wherein said step of executing code includes calling a method of said instantiated object.

24. (Previously Presented) The method of claim 23 wherein said executing code determines that said target device is said type of device, said method further comprising:

calling a second method of said instantiated object to create a unique identifier for said device.

25. (Previously Presented) The method of claim 21 wherein said code is operable to query said target device for additional device information.

26. (Previously Presented) A method for determining the nature of a device associated with an input/output (I/O) path, said method comprising:

retrieving device information from a target device associated with said I/O path utilizing a device control protocol;

retrieving a property defining the nature of a known device;

executing code associated with said property file, wherein said code is operable to uniquely identify said target device, and operable to determine whether or not said property file defines the nature of said uniquely identified device.

27. (Previously Presented) The method of claim 26 wherein said executed code further determines the device type of said target device.

28. (Previously Presented) The method of claim 26 wherein the unique identity of said target device is capable of being determined in a plurality of device control protocols.

29. (Previously Presented) The method of claim 26 wherein said target device is a small computer system interface (SCSI) device, and wherein said step of retrieving said device information includes obtaining a vendor identifier and a product identifier of said target device from a host agent.

30. (Previously Presented) The method of claim 26 wherein said target device is an simple network management protocol (SNMP) device, and wherein said step of retrieving includes obtaining a SNMP system object identifier of said target device.

31. (Previously Presented) A system for determining the nature of a target device associated with an input/output (I/O) path, said system comprising:

at least two device identifying code sets, wherein each said code set is operable to identify a different group of devices;

at least two property files, wherein each said property file defines a different device type, and wherein each said property file is associated with a different identifying code set; and

a processor operable to call one said property file and execute said identifying code set associated with said called property file, wherein said identifying code set associated with said called property file determines if said target device is a member of the group defined by said called property file.

32. (Previously Presented) The system of claim 31 wherein each said identifying code set is capable of uniquely identifying a device.

33. (Previously Presented) The system of claim 31 wherein the nature of said target device can be determined in a plurality of device control protocols.

34. (Previously Presented) The system of claim 33 wherein said target device can be uniquely identified regardless of the device control protocol.

35. (Previously Presented) The system of claim 31 wherein at least one said identifying code set is operable to communicate with a host agent to obtain information utilized to determine whether said target device is the type of device defined by the property file associated with said identifying code set.

36. (Previously Presented) The system of claim 35 wherein said host agent provides an application programming interface (API) to obtain said information.